(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 15 January 2004 (15.01.2004)

PCT

(10) International Publication Number WO 2004/006367 A2

(51) International Patent Classification7:

(21) International Application Number:

PCT/GB2003/002973

H01M 8/00

(22) International Filing Date:

9 July 2003 (09.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0215790.7

9 July 2002 (09.07.2002)

- (71) Applicant (for all designated States except US): INTEL-LIGENT ENERGY LIMITED [GB/GB]; Rolls House, 7 Rolls Buildings, Petter Lane, London EC4A 1NH (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HOOD, Peter, David [GB/GB]; c/o Intelligent Energy Limited, Rolls House, 7 Rolls Buildings, Fetter Lane, London EC4A 1NH (GB). ADCOCK, Paul, Leonard [GB/GB]; c/o Intelligent Energy Limited, Rolls House, 7 Rolls Buildings, Fetter Lane, London EC4A 1HN (GB).
- (74) Agent: CHARIG, Raymond, J.; Eric Potter Clarkson, Park View House, 58 The Ropewalk, Nottingham NG1 5DD (GB).

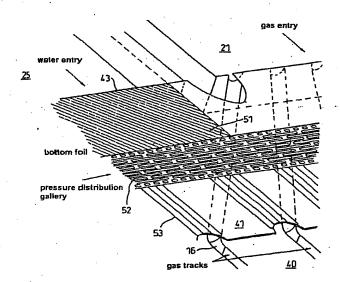
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian potent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM). European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FUEL CELL DIRECT WATER INJECTION



(57) Abstract: A fuel cell assembly provides for direct water delivery to water injection points in the active area of fluid flow field plates of the assembly. The fluid flow field plate has a plurality of channels formed in the surface thereof which extend across the surface of the plate in a predetermined pattern, defining the active area of the plate. A distribution foil has a plurality of channels formed in a surface thereof which channels extend from a first edge of the distribution foil to a second edge of the distribution foil. The channels terminate at the second edge at positions substantially coincident with respective ones of the field plate channels at water injection points. A cover foil extends over the distribution foil to enclose the distribution foil channels and thereby form conduits for the water between the two foils.

BEST AVAILABLE COPY